

Andrew J. Fiala

Backend Developer | Generative AI | AWS/GovCloud | IaC | Kubernetes

Summary

Backend developer with strong focus on AI-driven Retrieval-Augmented Generation (RAG) solutions. Adept at building **robust APIs** with **FastAPI**, **PostgreSQL**, **AWS Bedrock**, and **Pydantic**. Skilled in **Infrastructure as Code** (IaC), **AWS GovCloud architectures**, **zero trust security** solutions, and multi-account setups. Experience **leading generative AI and Kubernetes-based projects** for enterprise clients.

Core Skills

- **Languages & Frameworks:** Go, Python, FastAPI
- **Cloud & Infrastructure:** AWS (GovCloud, API Gateway, Multi-Account), Terraform, Kubernetes, helm
- **Databases:** PostgreSQL
- **DevOps & Tools:** GitHub Actions, Docker, Ansible, IaC (Terraform/CloudFormation)
- **Methodologies:** Test-Driven Development (TDD), Zero Trust Architecture

Development Experience

Backend Developer, Lean Innovation Labs (Reston, VA)

- Developed the backend for OpsLoom, a **production RAG application** using **FastAPI**, **PostgreSQL**, **AWS Bedrock**, and **Pydantic**, enabling enterprise and public sector clients to efficiently search and query their proprietary knowledge bases
- Spearheaded **AWS GovCloud multi-account architecture** for DoD client; led **API Gateway integration**, **Okta integration**, and **IaC migration**, resulting in a fully compliant FedRAMP system
- Designed and implemented a **control-plane RESTful API** for an edge-compute platform leveraging the **Helm SDK**, **SQLite** and the **Kubernetes API** to improve Navy developer experience when deploying applications onto MSC ships with limited compute and connectivity
- Extended OpsLoom backend for **custom RAG solutions for the Military Sealift Command**, empowering sailors to get help with legacy software using a familiar chat interface
- Built automated **CI/CD pipelines** using **GitHub Actions** and **Terraform** to streamline deployments across development, staging, and production environments
- Automated deployments and infrastructure provisioning for AI Engineering teams which significantly reduced our time-to-market

Infrastructure Engineer, JP Morgan (Chicago, IL)

- Supported enterprise infrastructure for critical financial applications

Education

- Bachelor's Degree from the University of Kansas, 2019

Certifications

- AWS Certified Solutions Architect – Professional
- AWS Certified Security – Specialty
- Red Hat Certified Engineer (RHCE)
- Red Hat Certified System Administrator (RHCSA)

References available upon request.